Accessing The Internet

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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00354   of Land Management

Accessing the Internet - Guide for the Bureau of Land Management

May 1995

To obtain electronic copies of this manual, contact:

Bureau of Land Management
Office of IRM/Modernization

Table of Contents

The Internet is a world wide collection of computer networks that allows individuals and organizations to communicate and share information. It is often referred to as the Information Super Highway or as part of the National Information Infrastructure (NII). Internet technology, used effectively, can improve our efficiency in gathering, analyzing and distributing scientific data, and communicating with customers and other agencies. The organization, amount, and complexity of data available on the Internet, along with security and liability concerns, make it necessary to implement a clear policy for appropriate and productive use of this resource.

Bureau of Land Management (BLM) Policy

Access to the Internet via government equipment or communications links is for official business only. All other uses are prohibited. Use of the Internet is a privilege, not a right, that may be revoked at any time for inappropriate use or conduct. Examples of appropriate use include: research for specific job-related objectives; communication with technical peers on officially recognized issues; and exchange and sharing of job-related information. Inappropriate use encompasses anything that is not directly job-related.

The sending or receiving of copyrighted materials (including articles and software) via the Internet is prohibited by copyright laws. Individual users are responsible for validating software licensing prior to downloading and using files or information. Individuals are also responsible for scanning downloaded files and e-mail attachments for viruses and reporting infected files to the Network Administrator and/or AIS Security Officer immediately. Remember, shareware is NOT freeware. Downloads and e-mail will be routinely monitored and violators of copyright, security or appropriate use policy will be subject to disciplinary action.

E-mail messages will not include offensive or harassing statements, including disparagement of others based on their race, national origin, sex, sexual orientation, age, disability, religious, or political beliefs. Sending or soliciting sexually oriented messages or images is prohibited. When stating a position in a message be sure to differentiate your beliefs from official BLM policy by including a disclaimer that you do not speak for the agency. Be aware that what you put into your messages reflects on the Agency.

BLM will provide Internet access to individual users on their desktop systems. Internet access will be obtained with a registration procedure. Once full access becomes available, employees desiring access must request it through the first level supervisor, using the Internet Access Registration form. It will be the supervisor's responsiblitiy to validate employee requirements prior to submitting the registration. It will also be the first level supervisor's obligation to monitor and manage individual use of this resource.

To provide BLM Internet users with a convenient source of current Internet information, BLM will establish the *(DW to decide about a listserv, library server or bulletin board) available through your local electronic mail package (Groupwise, FTS2000MAIL, etc.). This bulletin board will contain references, updated navigation information, and a forum for users to communicate, share useful site addresses and information, and to help each other.*

Levels of Access

Internet electronic mail - Internet e-mail may be used for official business to communicate with other users on the net and to request files or other information. Internet e-mail is exclusively for sending mail to someone not available through your regular local electronic mail package. Do not address e-mail through the Internet gateway if an individual is available via your local electronic mail package, such as GroupWise and ATTMAIL.

World Wide Web (WWW) Internet Access - BLM will provide full access via the WWW and is in the process of selecting an interface software package to provide a user-friendly, graphical interface to the Internet. The package will include a WWW browser such as Mosaic or Netscape. A WWW browser is a program that integrates text, graphics, and audio in a Windows-like environment to assist information discovery and retrieval on the Internet. Although user-friendly, this interface is also very complex and requires training for effective use. Command level utilities such as FTP and Telnet will be available for use in special circumstances, but BLM will encourage use of the WWW for most applications.

How to Get Connected *(Note: Full access is not yet available on a Bureauwide basis)*

Submit the **Internet Access Registration** form through you first level supervisor. Be prepared to explain your requirements in clear terms of potential productivity improvements. Training, the learning curve, staff support, system resources, and your actual time spent searching for information represent a huge resource expenditure. Once your registration is received by the Network Administrator, it will take a short time to activate your connection. Network support staff will work with you to set up your system for access.

Training

No formal training is required for use of the local electronic mail packages. Basic instructions for accessing your local electronic mail package can be obtained from your local IRM user support group. Be aware that you can slow down the entire network by requesting large file transfers. Internet use may be restricted in cases of recurring, disruptive incidents of unscheduled large file transfers. Also, files that are mailed to you could contain viruses. All new files must be scanned for viruses before use.

Full Internet Access training should include, as a minimum, familiarization with the WWW and hypermedia, specific training in your organization's selected interface package, security awareness, and at least a full day of supervised, hands-on navigation and information retrieval techniques to identify the most useful resources for your application(s). For a list of training resources, check the Internet Connection Bulletin Board.

References to help you understand and navigate the Internet are available in your regional library and on-line. Check the Internet Connection Bulletin Board for specific titles and on-line references.

Netiquette

You are ultimately responsible for your actions while accessing Internet services. The Internet
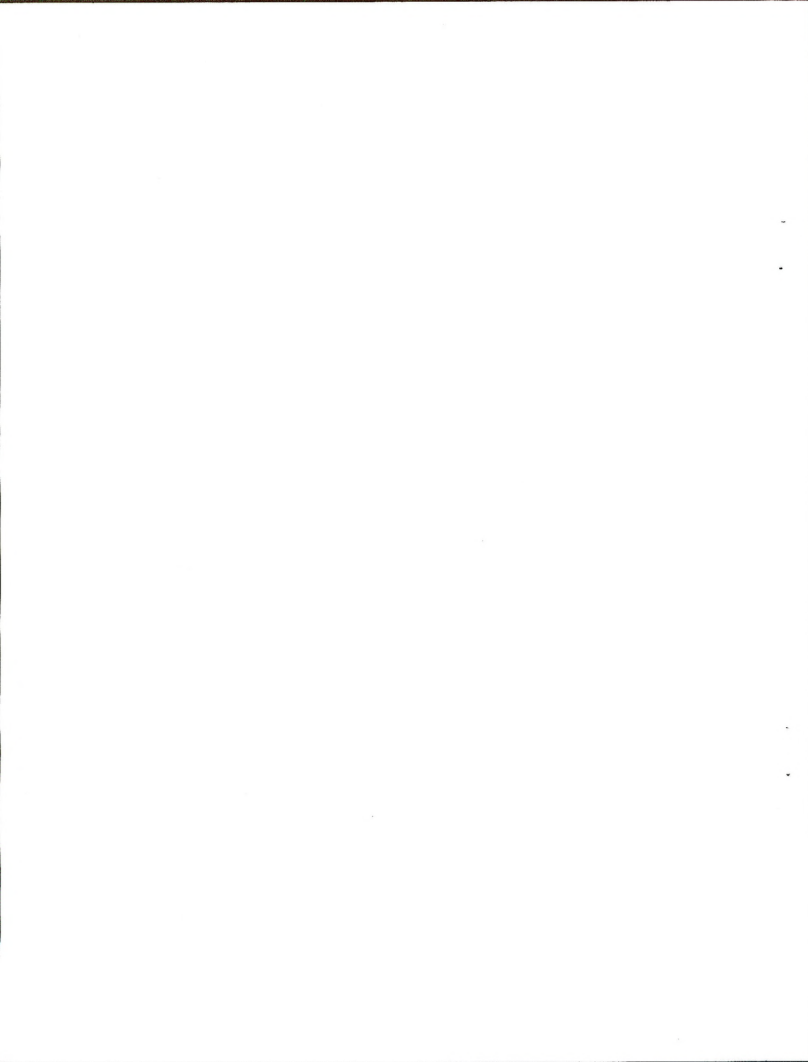
is a group of thousands of individual networks which allow information to pass among them. Be aware of the load placed on these other networks (as well as your own), and abide by the policies and procedures of all of them. Here are some basic netiquette rules:

Check and manage your e-mail daily. Delete unwanted messages immediately to save disk storage.

Limit downloads (especially those larger than 1 Mbyte) to after normal business hours for both your network and the host's. Think in terms of the current time at the site that's being visited. Check files for viruses. Report all infected files to your LAN administrator.

Keep messages short and to the point.

Include your signature at the bottom of e-mail messages. Your signature should consist, as a minimum, of your name, position, affiliation, phone and fax numbers and Internet address - but should not exceed six lines.

Capitalize words in a message only to highlight an important point. Capitalizing too many words is generally regarded as SHOUTING!

Be professional and careful in what you say. E-mail is easily forwardable and should be regarded as a postcard rather than a sealed letter. Cite all quotes and sources and respect copyright laws and license agreements. Don't say anything that you wouldn't want the world to know, because the world just might!

Be careful when using sarcasm or humor. Without face to face communications your joke may be viewed as criticism.

Security

The Internet cannot be considered secure. Therefore, do not send sensitive information (proprietary, privacy act, FOIA) over the Internet.

Before distributing any agency data you must obtain approval from your supervisor. Any program information you send out must represent the agency's official position. Guidelines for providing BLM information over the Internet are being developed.

Internet Concepts

Electronic Mail

Electronic mail on the Internet functions like the local electronic mail package that BLM users are already familiar with and allows convenient communication and document exchange among Internet users. In fact, BLM is using a local electronic mail package gateway for Internet e-mail so the procedures for use are very similar. The major difference with Internet e-mail is the lack of a directory or simple method of finding individual addresses for users on
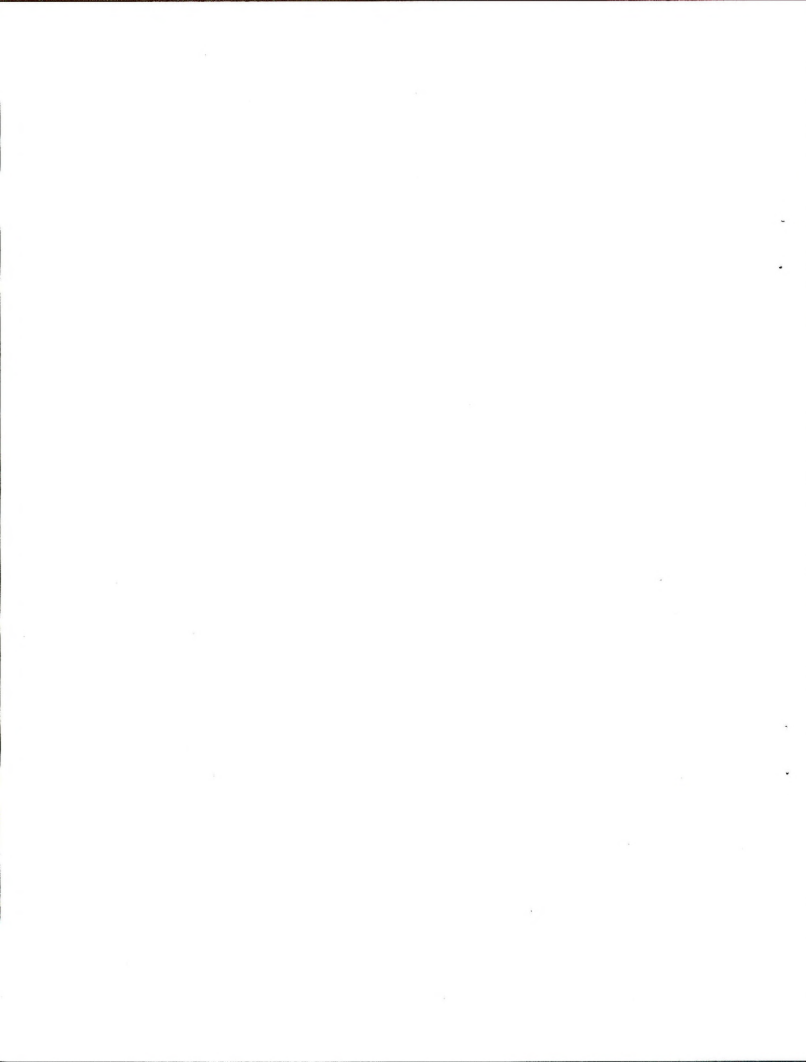
other networks. The best solution to this problem is to contact the person via phone or regular mail to obtain their Internet address.

Electronic mail can also be used to request files and information. Because large file transfers tie up resources and slow down network processing for everyone, users should be cautious about requesting files of unknown size. If large file transfers (more than 10 megabytes) are absolutely necessary, consider using FTP instead. In all cases, verify the copyright status of the file, do not retain, store or use shareware or copyrighted materials, and check all files for viruses.

Using the local electronic mail package Internet Gateway

Sending E-mail - Sending e-mail through the Internet gateway is very similar to sending e-mail to other local electronic mail package users. Access local electronic mail package in the usual way. State, Center or site network administrators can provide addressing information for local electronic mail packages.

Receiving Mail from Internet Users

The Internet Gateway allows you to receive e-mail from Internet users using the same procedures as for regular local electronic mail package. Network administrators can provide Internet addresses for BLM users.

Command Level Utilities

FTP and Telnet are command level utilities that you may have encountered when reading about or discussing the Internet with others. FTP allows file transfers between servers. Telnet allows connection to databases and information resources. This connection allows you to work on the remote host as if you had a direct connection. These utilities require that you learn specific commands and methods for accessing and transferring files to and from other servers on the Internet. Most BLM Internet users will not need access to these commands, and will find that everything they need is available via the WWW browser.

Gopher

Gopher is a menu system that allows access to information services across the Internet. Your WWW browser will allow concurrent access to Gopher sites. In most cases this will be transparent as hypertext links will already be properly formatted.

World Wide Web

The WWW (or W3) can be defined as a hypertext-based system for finding and accessing Internet resources. Most of the content on the Internet (anonymous ftp sites, gopher sites, WWW sites) can be accessed via a WWW browser.
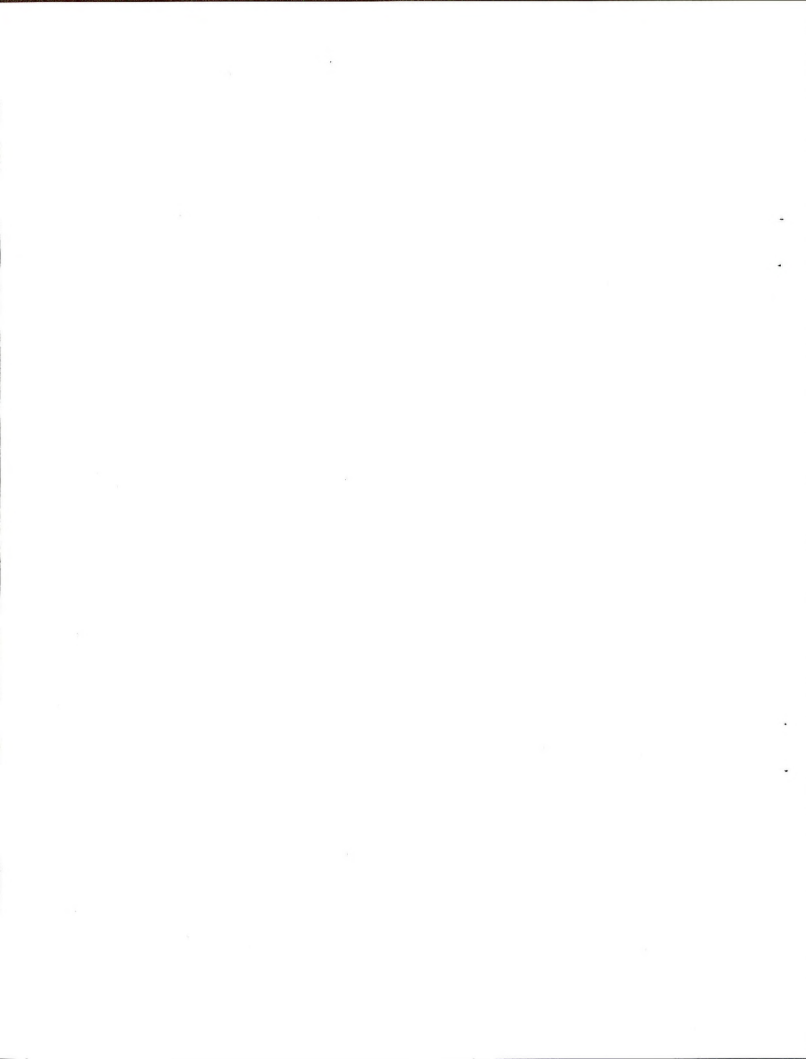
Using a World Wide Web Browser

WWW browsers, such as Mosaic and Netscape, provide a graphical interface with hypertext links to allow easier access to the information on the Internet. With this interface you don't have to learn UNIX commands such as FTP or Telnet. To use a WWW browser you must have UNIX or TCP/IP protocol on DOS and MacIntosh microcomputers. To access the browser, point at the icon and double click.

Features - Most browsers are organized with the familiar Windows-type menu, offer a few buttons for commonly used functions, and have similar features:

> Links to related files, topics and sites via hypertext interface
> File saving and printing
> Bookmarks or hotlists and automatic loading of selected sites
> Navigation tools allowing movement forward, back and "home"
> Graphics, video and sound

Hypertext - the colored, highlighted text, provides immediate links to files or sites with more information on the topic. Click once on any highlighted text and that link will immediately (depending on the speed of your connection, the load on the network, etc...) appear. You can return to the originating site or file by clicking on the Back key or selecting Navigate; Back from the menu. In many browsers, the links you have selected will be highlighted in a different color than those you have not used. The frame around certain graphics may also be highlighted. This means you may click on the graphic to get additional information or to enlarge it.

URL -   Locations and files on the WWW are identified by their Uniform Resource Locator (URL), which you might think of as an address. For example, the URL for the home page of the House of Representatives WWW site is

http://www.house.gov

http://	defines the *protocol* for exchanging information and files
	other protocols: gopher:// - gopher sites
	file://ftp - anonymous ftp
www.house	is the *host server*'s name
gov	is the *domain* - some other common domains include:
	commercial - com
	educational - edu
	network operations - net
	U.S. military - mil
	country domains (UK. AU. US. etc.)
/dir/file	anything following the domain represents a specific *directory or file* location on the host server
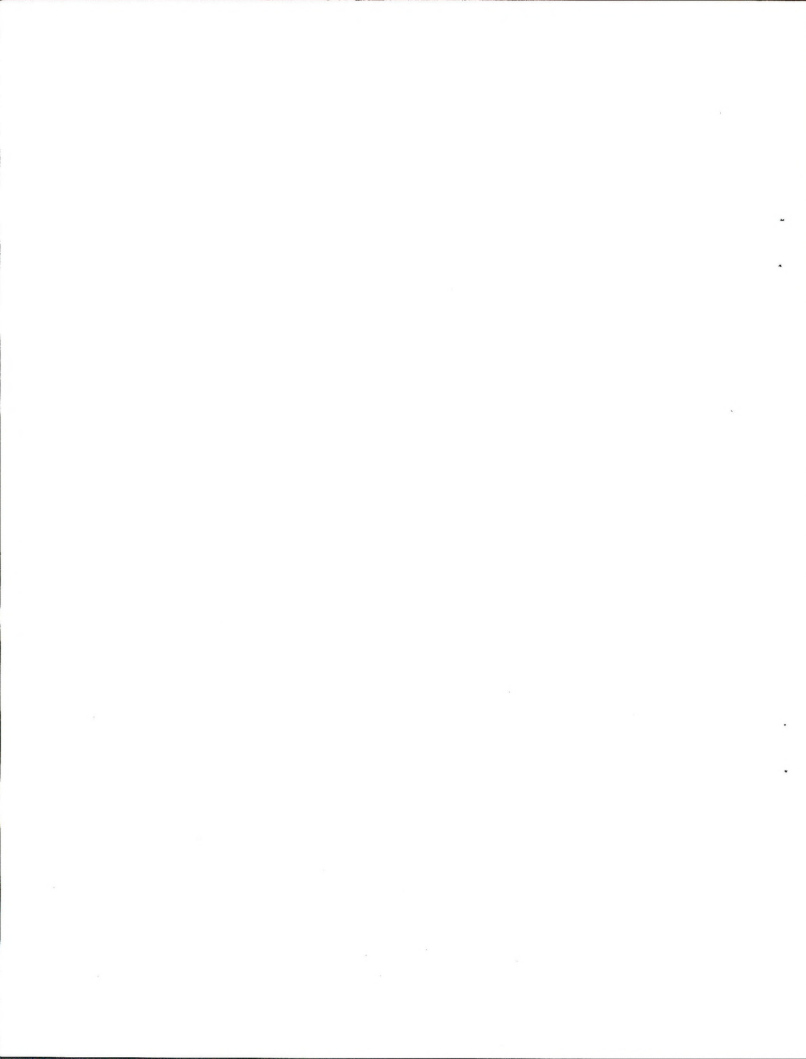
On most browsers, the URL of your current location will be displayed somewhere near the top of your screen. As you place your pointer over highlighted text you will also see that link's URL at the bottom of your screen. If you know the URL of a specific site or file you can access it directly by using the "Open" feature of your browser. This will prompt you to type in the URL. You must type it exactly, retaining upper and lower case as well as any special characters included in the URL.

Home Pages

Many WWW sites maintain home pages. These serve as a startup or entry point into a specific service or site and contain links to related information. For example, many U.S. cities maintain home pages that begin with a brief description of the city followed by links to specific information such as entertainment, government, maps, etc. The home page provides an introduction and its links represent a table of contents. Most government agencies, universities, many commercial companies, and even individuals now maintain home pages. The BLM home page is located at:

TBD - in WO by 1 July 1995

Surfing

One complexity of WWW browsing initially is the likelihood of getting "lost". Clicking on the highlighted text that represents a link can move you from a U.S. server to a server in Australia. From there you could link to anywhere else in the world. This is called "surfing", and some amount of it is necessary to begin learning your way around. Make use of your Back, Forward and Home features (if you don't see the buttons, try the Navigation portion of the menu). If all else fails, just quit and start over.

Searching

The quantity of information available is overwhelming and interesting links can lead you far astray of your original goal. Fortunately, there are several sites on the Internet that allow you to do a text search by topic and content. These include:

World Wide Web Worm (title & content)   http://www.cs.colorado.edu/home/mcbryan/wwww.html
Lycos (title & content)   http://lycos.cs.cmu.edu
Webcrawler (title & content)   http://webcrawler.cs.washington.edu/WebCrawler/WebQuery.html
Jump Station (title & headings)   http://www.stir.ac.uk/jsbin/js

You can also save useful and frequently accessed sites in your bookmark or hotlist features. Once you've found a site you want to revisit (such as the Lycos search page), you can click on the menu (Bookmarks or Navigate; Hotlist) and use the add feature. Once added these provide a direct link and you won't have to remember or type the URL.
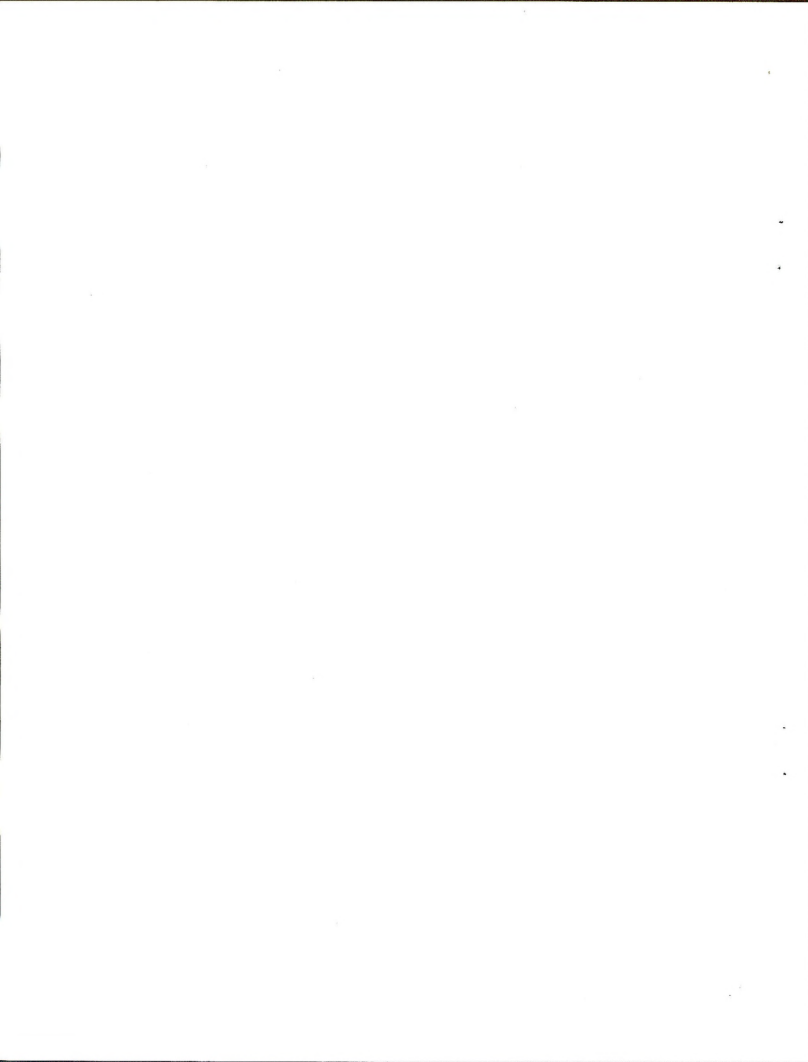
Roadblocks

Finally, be patient. Often your attempts to link to a site will fail. Sometimes it means the site is too busy to accept additional access, or a server could be down for maintenance. Other times the system will seem to slow to a crawl or your PC will lock up. Most of these incidents are not due to any local failure, but rather reflect the sometimes unstable nature of the Internet itself. In most cases, it's best to wait and try later. Report any persistent problems (such as inability to link to ANY site) to your LAN administrator.

Electronic Forums

Electronic forums provide a way for users to exchange information, discuss issues, and find solutions to common problems. There are electronic forums on every imaginable topic.

Newsgroups (USENET)

Newsgroup contents will be stored in a central location on the network to avoid duplicate subscriptions and conserve resources. If you want to subscribe to a newsgroup that is not included in the network subcription files, contact your network administrator with the name of the newsgroup. You should see the requested files at the central location within 3 working days. The location of newsgroup files will be announced, when available, on the Internet Connection Bulletin Board.

Mailing Lists (LISTSERV, BITNET)

Unlike Newgroup messages, that are stored in one central location on the host computer, mailing list messages are delivered directly to your e-mail box. Most mailing list forums use the LISTSERV program. To join a typical list send the following internet e-mail message: .

> SUBSCRIBE *[forum name]* *[your first name]* *[your last name]*
> with no subject to the following internet address:
> LISTSERV@*[list domain name]*

For example, to join the Geographic Information Systems (GIS) forum send the following message, with no subject:

> SUBSCRIBE GIS-L JOHN SMITH
> to Internet address:
> LISTSERV@ubvm.cc.buffalo.edu

Once your address has been added to the list you will usually receive more information about the list and using the listserver. Keep a copy of this information as a reminder of how to exit, get back copies, post information, and cancel. Archives of listservs can also be searched.
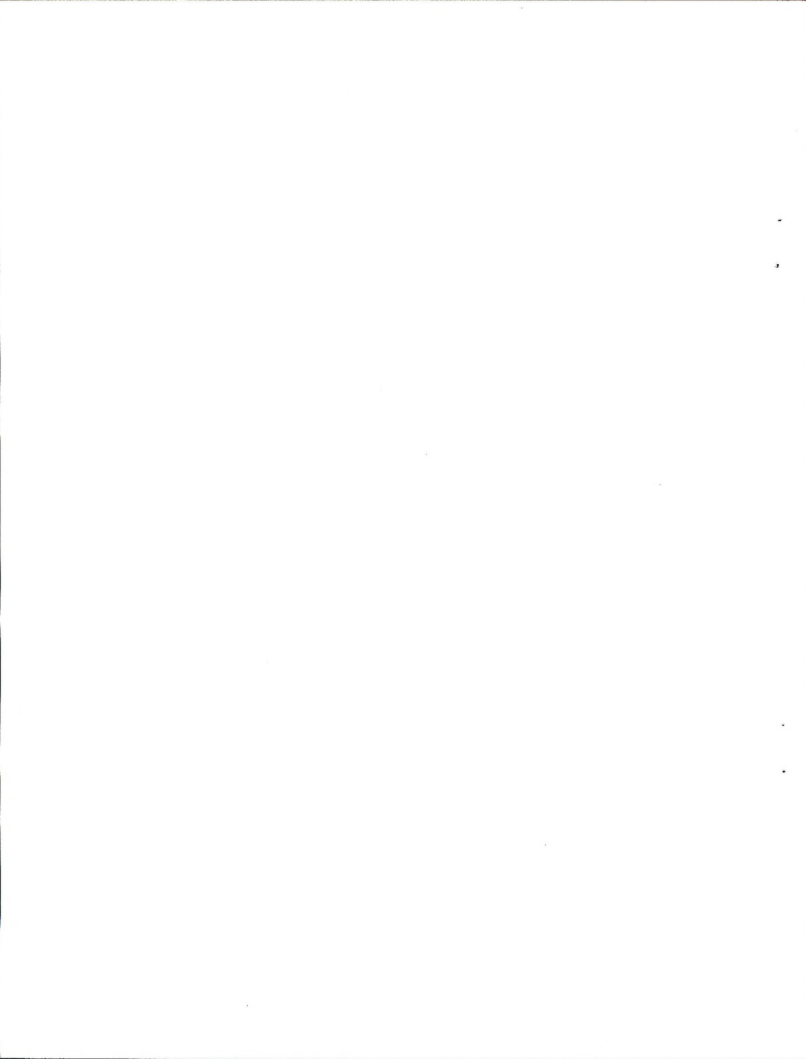
Sending Messages to Mailing Lists

Before sending a message, read the messages for a few days to learn what types of subjects are discussed on the list. To send a message, address it to:

> *[listname]*@*[list domain name]*
>
> ex: GIS-L@ubvm.cc.buffalo.edu

Describe the topic of the message in the subject line. Messages should contain fewer than 50 lines, or if longer, provide a warning in the subject line.

In general, replies to messages should be sent privately to an individual rather than to the entire list.

## Limiting the Number of Messages Received

Electronic forums vary in the number of messages they generate. Some generate 50 or more per day while others fewer than 2 per month. Join forums one at a time to make sure you can keep up with the traffic on a particular list. Some forums offer a digest service where messages are compiled once a day and sent in a packet with a table of contents. The command to set this option is:

> SET [listname] DIGEST
>
> ex: SET GIS-L DIGEST

mailed to the LISTSERV
(ex: LISTSERV@ubvm.cc.buffalo.edu NOT GIS-L@ubvm.cc.buffalo.edu)

Reporting Internet Problems

All Internet problems should be reported to your Help Desk or Network Administrator.
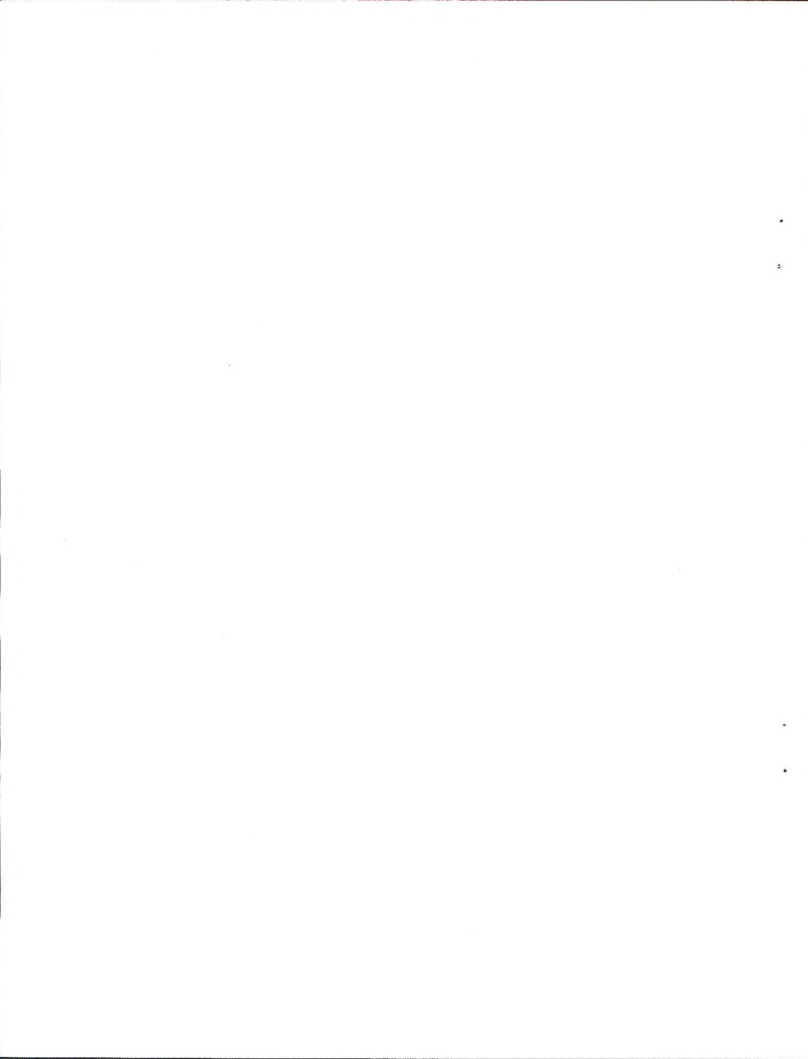
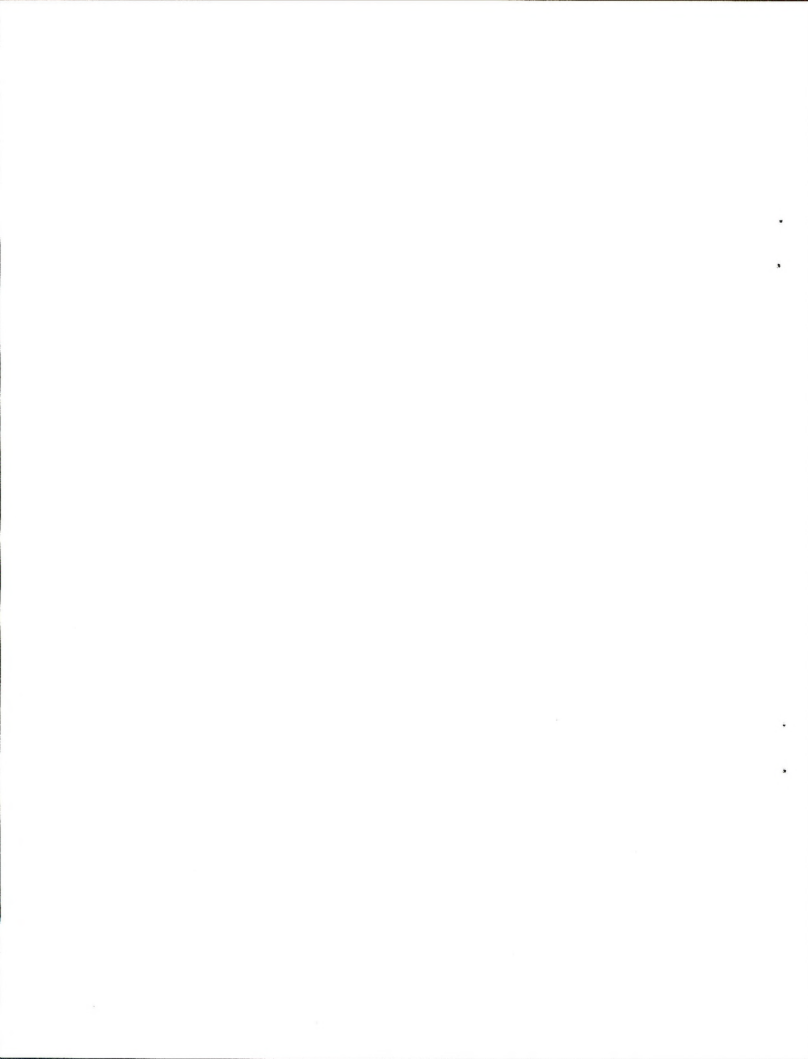## Bureau of Land Management
Internet Access Registration Form

How to Complete this Form
Complete items 1 - 7 (print in items 1-4)
Submit to supervisor for signature
Forward to your IAISSO (See Appendix D or the Internet Connection Bulletin Board)

1. User Name	2. Organization	3. Phone

4. Requirements for Internet Access

5. Level of Access Requested (circle one)	Date Granted	Authorization Signatures
Internet Access via WWW *(recommended for most applications)*		Supervisor
		IAISSO
Command level access		Network Administrator

I understand that upon being granted access to Internet within the Bureau of Land Management, I am accepting responsibility to use this system in the performance of official business only, to safeguard the information assets of the agency according to established security procedures and good ADP security practices, to read and become familiar with appropriate operating and security instructions, and to report any security incidents to my supervisor and the IAISSO. I have also read and/or been briefed on appropriate use of the Internet and the proper use of passwords. I understand it is my responsibility to protect my passwords from loss or disclosure and to change them in accordance with system guidelines. I understand that my passwords may be considered a legal signature and I may be held accountable for any system activities using my password.

6. Signature of User	7. Date

Domain	The last part of an address, such as .com or .gov
Download	Copy a file from a host system to your computer.
E-mail	Electronic Mail - a way to send messages to others on the network. Used as both noun and verb.
Emoticon	A way to describe emotion on line. For example, look at these smileys sideways :-) ;-) :-(
FAQ	Frequently Asked Questions - A compilation of answers to these. Usual file extension (*.faq) for a file containing common questions and answers.
Finger	An Internet program that lets you get some bit of information about another user, provided they have first created a .plan file.
Flame	Online yelling or ranting directed at someone else.
Freeware	Software that doesn't cost anything
FTP	File Transfer Protocol - allows access to FTP file servers for login and file download. Anonymous FTP allows connection to a remote host, as an anonymous guest, to download files to your computer.
Gopher	A menu-driven method of linking servers on the net.
Host System	A public-access site that provides net access to people outside the research and government communities.
IMHO	In My Humble Opinion - one of many acronyms commonly used during online communication.
Internet	A worldwide system for linking smaller computer networks together. Networks connected through the Internet use a particular set of communications standards known as TCP/IP.
LAN	Local Area Network - The communications system that links your computer (and others in your office or area) to your local server.
Mosaic	Mosaic is a program written by the National Center for Supercomputing Applications at the University of Illinois which integrates text, graphics, and audio to assist information discovery and retrieval on the Internet.
Post	To compose a message for a Usenet newsgroup and then send it out for others to see.
Protocol	The method used to transfer a file between a host system and your computer.
Server	A computer that can distribute information or files automatically in response to specifically worded requests.

Shareware	Software that is freely available, but if kept and used, must be registered and paid for.
TCP/IP	Transmission Control Protocol/Internet Protocol - the particular system for transferring information over a computer network that is at the heart of the Internet.
Telnet	Command allowing remote login to a server.
UNIX	Common operating system for most Internet sites.
Upload	Copy a file from your computer to a host system.
Usenet	Collection of electronic bulletin boards (newgroups) on an enormous range of subjects.
WAIS	Wide Area Information Service - client/server tool for searching online databases
WWW	World Wide Web - hyperlinked system for retrieving information resources on the Internet

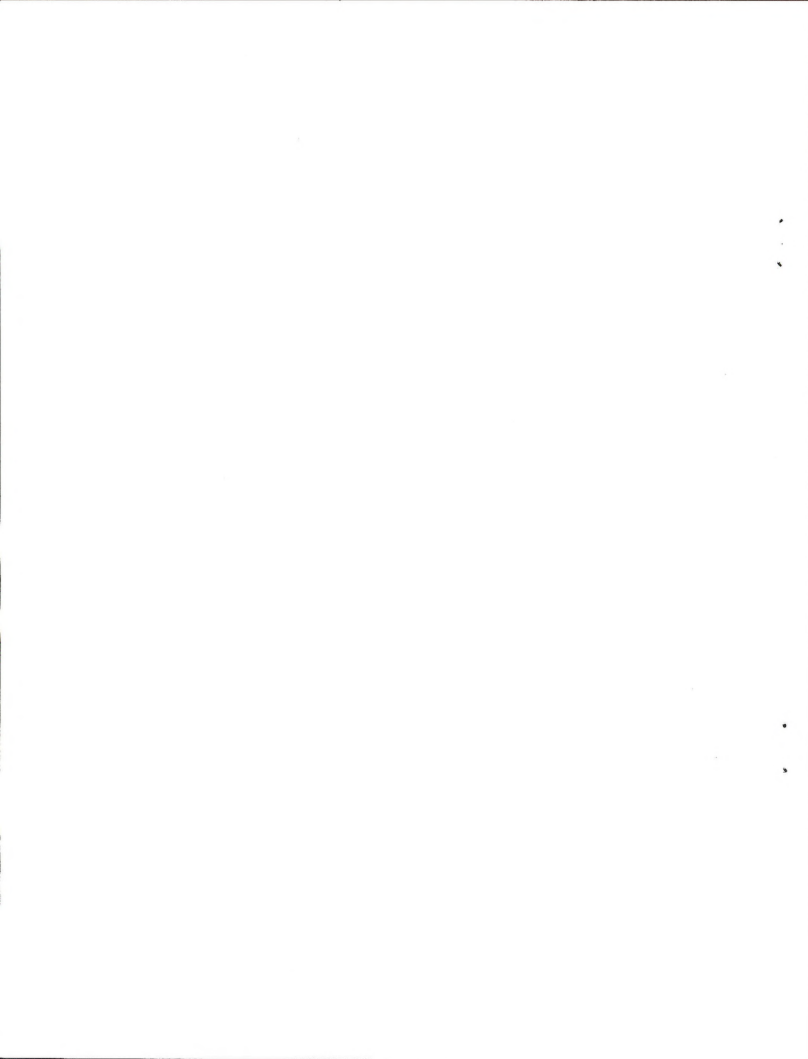# Appendix B
Sites of Interest to BLM

http://www.whitehouse.gov — White House home page

http://www.ncsa.uiuc.edu — NCSA Mosaic home page

gopher://is.internic.net:70/11/infosource — Internic Gopher

http://hoohoo.ncsa.uiuc.edu.80/ftp-interface.html — FTP sites.

http://info.cern.ch/hypertext/DataSources/bySubject/Overview.html — WWW search by subject

http://wings.buffalo.edu.world — Maps to the Internet

http://lcweb.loc.gov/homepage/lchp.html — Library of Congress

http://sunsite.unc.edu/govdocs.html — Sunsite-based government documents

http://lib-www.ucr.edu/govpub — Infomine - extensive Internet resource list

http://www.census.gov/ — Bureau of Census home page

http://www.fedworld.gov/ — FedWorld Information Network (NTIS)

Updates to this appendix are available on the Internet Connection Bulletin Board.

Appendix C
Electronic Forums of BLM Interest

Newsgroups are divided into seven broad classifications, which are organized in groups and subgroups according to topic:

comp   Topics of interest to computer professionals and hobbyists.
sci   Discussions marked by special and usually practical knowledge relating to research in or application of the established sciences.
misc   Groups addressing themes not easily classified under other headings or multiple categories.
soc   Groups primarily addressing social issues and socializing.
talk   Debate oriented, featuring long discussions without resolution and little useful information
news   Concerned with news network and software.
rec   Oriented towards arts, hobbies, and recreational activities.

Current newsgroups of interest (Updated December 1994):

|	
comp.client.server	Topics in client/server technology
comp.databases	Database and data management issues and theory
comp.databases.oracle	SQL database products of the Oracle Corporation
comp.os.ms-windows.setup	Installing/configuring Microsoft Windows
comp.security.misc	Computer security issues
comp.sys.sun.admin	Sun system administration issues and questions
news.announce.newusers	Explanatory posting for new users
news.groups	Discussions and lists of newsgroups
sci.data.formats	Modeling, storage and retrieval of scientific data
sci.geo.petroleum	All aspects of petroleum and the industry

Mailing Lists

BITNET (Academic & Research) Conferences

ECOSYS-L@vm.gmd.d (245)	Ecosystem theory and modeling
CHEST-ARC-INFO@mailbase.ac.uk	Technical ARC-INFO issues
COASTGIS@irlearn.ucd.ie	GIS of coastal regions
listserv@bitnic.educom.edu	GET INTERNET LISTING

On-line listings are always the most current!
To obtain a full listing of newsgroups on the net:

> http://www.cis.ohio-state.edu:80/hypertext/faq/usernet/active-newsgroups/

Updates to this appendix are available on the Internet Connection Bulletin Board.
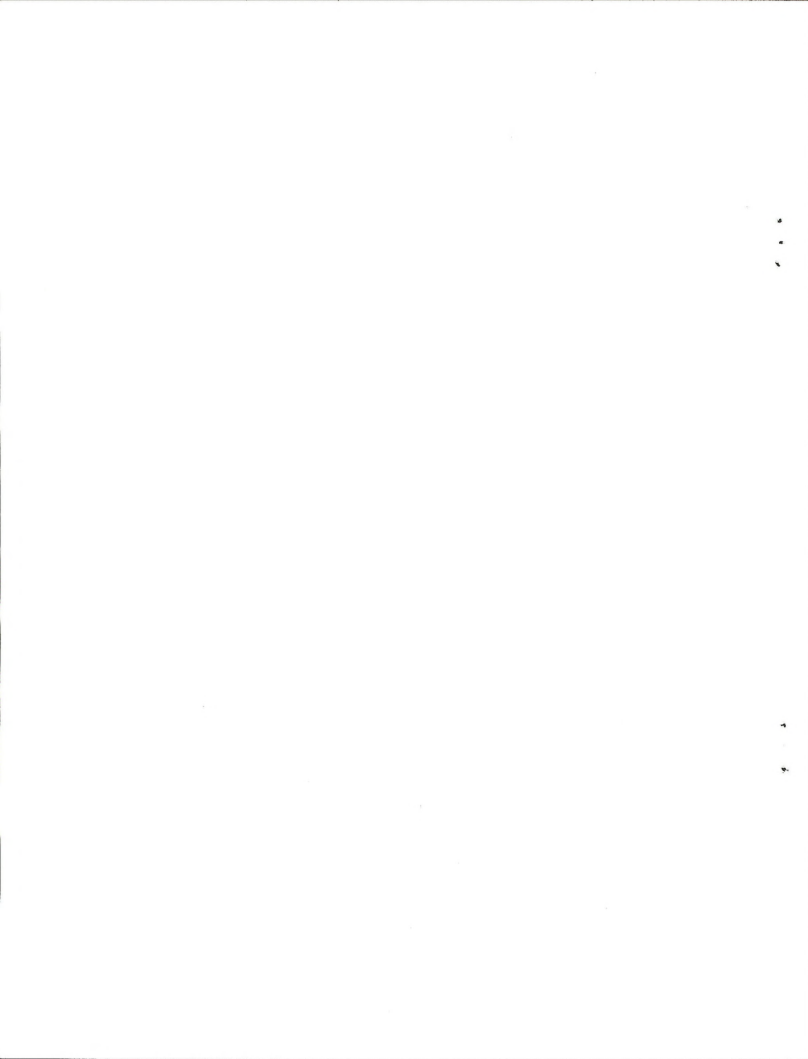
Appendix D
BLM IAISSO Listing

Location	IAISSO Name	MS	Phone
Bureau (Acting)	Chuck Wood	DW-130	303-236-6430
Alaska	Pam Chesla	AK-940	907-271-4216
Arizona	Pat Day	AZ-954	602-650-0296
California	Chuck McCoy	CA-954	916-979-2790
Colorado	Robert Brown	CO-950	303-239-3664
Eastern States	Pam Quallich	ES-963	703-440-1634
Idaho	Earl Carnagey	ID-954	208-384-3248
Montana	Asko Virtanen	MT-954	406-255-2958
Nevada	Duane Libert	NV-954	702-785-6599
New Mexico	Jo An Knight	NM-940	505-438-7620
NIFC	Cathy Banks	RP-222	208-387-5360
Oregon	Cynthia Yee	OR-955	503-952-6117
Utah	Jeanine Hunter	UT-950	801-539-4161
Wyoming	Craig Wood	WY-950	307-775-6066
DW/SC	Chuck Wood	DW-130	303-236-6430

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OFFICE OF IRM/MODERNIZATION
DENVER FEDERAL CENTER, BUILDING 40
P.O. BOX 25047
DENVER, COLORADO 80225-0047

In Reply Refer To:
1264 (DW-130)
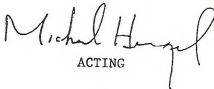
June 7, 1995

Instruction Memorandum No. DW-95-4045
Expires: 9/30/96

To: ADs, SDs, SCD, Manager-NTC, D-NIFC

From: Chief, Office of IRM/Modernization

Subject: Policy for Accessing the Internet

This Instruction Memorandum transmits a guide for BLM employees
accessing the Internet (Attachment 1). The guide contains a
registration form for employees to submit through their
supervisor and Installation Automated Information System (AIS)
Security Officer to the Network Administrator. The purpose of
registering is to provide a record of BLM users and obtain user's
acceptance of responsibility. Use of these forms is mandatory
effective immediately.

The guide is intended to assist employees in finding needed
information. Guidelines for serving information to the public on
the Internet were provided for review and comment with
Information Bulletin No. DW-95-4070, dated May 9, 1995. This
final policy will be issued by July 1, 1995.

Please address any questions you have about Internet policy to
Renee Duval, IRM/Modernization Liaison Team (WO-106), at
(202) 452-5017.

                                    Michael Hengel
                                    ACTING

1 Attachment
    1 - Accessing the Internet, May 95 (17 pp)

Distribution
WO-106, LS, Rm 401
WO-890 (Yvonne Kinney), LS, Rm 775
SC-653, Library
DW-110, Central Files